DS-SERIES COAXIAL AND 3-WAY SYSTEMS

Owner's Manual 0535, 0540, 0546, 05525, 0560, 0568, 05693





DS-Series Coax Owner's Manual

Models: DS35 / DS40 / DS46 / DS525 / DS60 / DS68 / DS693

Attention:

Please record your purchase information in the area below. We recommend attaching the original sales receipt to this manual for future reference.

If you require service on this speaker during the warranty period, you will need to provide this information and a copy of the original sales receipt to Kicker for validation of warranty repairs.

ALWAYS KEEP YOUR RECEIPT!

Congratulations!

You have purchased one of the most technically advanced speakers in car audio. The DS-Series Coax was designed by the award-winning KICKER speaker design team, tested in the judging lanes of International Sound Competitions, and proven on the Street to deliver the ultimate in full-range frequency output, durability and outstandingly-clear SPL.

This is your "fuel for Livin' Loud™"!

Features

CIMP™ (Curvilinear Injection-Molded Polypropylene

Woofer Cones) is a high performance composite, which remains rigid, minimizes cone flex and lowers harmonic distortion. The CIMP[™] consists of a one-piece, injection-molded polypropylene material that moves as a piston, exhibiting power and control.

- New Enhanced BAM (Basket and Motor) Assembly utilizes a high strength steel basket, features a low-profile open design, and provides a solid foundation for the precision-aligned motor assembly.
- Optimized Polyfoam Ribbed Surround Radius allows extended cone excursion for additional bass output and higher SPL, and couples the suspension into a conjoined linear-motion body.
- High-Temp Polyimide Film Voice Coil Former improves sonic and conductive properties, and prevents thermal-electrical meltdown.
- Flexible Mounting of the DS40, which utilizes breakaway tabs, the DS60, which has a multiple mounting pattern on the frame allowing the DS60 to fit small and large 6 inch (15.2 cm) openings, and the DS68, which fits factory 5" x 7" (12.7 cm x 17.8 cm) and 6" x 8" (15.2 cm x 20.3 cm) locations, enable the DS-Series Coax Speakers to accommodate most installations.

- PEN™ Dome Tweeter with Neodymium Magnet provides a smooth high frequency response with quick, detailed and spatially-correct imaging. PEN is an acronym for the space age material "biaxially oriented polypropylene naphthalate film"--your parents' tax dollars probably paid for its development, you might as well enjoy it.
- High-Power Tinsel Lead Wires eliminate broken leads and power loss, due to the common use of "insufficient-gauge" lead wires.
- **Ferro-Fluid™** cooled tweeter voice-coil extends the high frequency transducer's life span.
- **Kicker Marine Ready** models come with water resistant mounting hardware. This enables the DS60 and DS693 to replace most stock boat speakers without rusting your ship.

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Performance

Model:	DS35	DS40	DS46	DS525
Speaker Design	2 - Way	2 - Way	2 - Way	2 - Way
Rated Impedance, ohm	4	4	4	4
DC Resistance, ohm	3	3	3	3
Sensitivity [SPLo], dB @ 1W, 1m	88	88	88	90
Power Range, Watts RMS	6-15	6-25	6-25	6-35
Peak Power Handling, Watts	30	50	50	70
Effective Frequency Range, Hz	80-20k	60-20k	50-20k	45-20k
Top-Mount Depth, in (cm)	1 5/8 (4.1)	1 13/16 (4.6)	1 3/4 (4.4)	1 7/8 (4.8)
Bottom-Mount Depth, in (cm)	1 15/16 (4.9)	2 1/16 (5.2)	2 (5.1)	2 1/8 (5.4)
Mounting Hole Diameter, in (cm)	3 1/16 (7.8)	3 11/16 (9.4)	3 15/16 x 5 15/16 (10x15.1)	4 1/2 (11.4)
Frame Diameter, in (cm)	3 7/16 (8.7)	4 (10.2)	4 1/16 x 6 1/8 (10.3x15.6)	5 1/8 (13.0)
Woofer Size, in (cm)	3 1/2 (8.9)	4 (10.2)	4 x 6 (10.2x15.2)	5 1/4 (13.3)
Woofer Cone Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Woofer Surround Material	Ribbed Polyfoam	Ribbed Polyfoam	Ribbed Polyfoam	Ribbed Polyfoam
Tweeter Size, in (cm)	1/2 (1.3)	1/2 (1.3)	1/2 (1.3)	1/2 (1.3)
Tweeter Design	Balanced Dome	Balanced Dome	Balanced Dome	Balanced Dome
Tweeter Diaphragm Material	PEN	PEN	PEN	PEN
Tweeter Magnet Material	Neodymium	Neodymium	Neodymium	Neodymium
Tweeter Protrusion, in (cm)	1/4 (.64)	1/4 (.64)	1/4 (.64)	3/16 (.48)
Midrange Size, in (cm)	N / A	N / A	N / A	N / A
Midrange Design	N / A	N / A	N / A	N / A
Midrange Cone Material	N / A	N / A	N / A	N / A
Grills Included	No	Yes	No	Yes

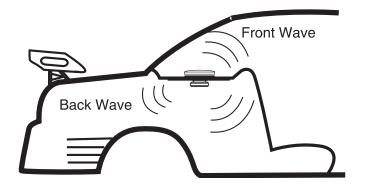
		Performance	
Model:	DS60	DS68	DS693
Speaker Design	2 - Way	2 - Way	3 - Way
Rated Impedance [Zn], ohm	4	4	4
DC Resistance, ohm	3	3	3
Sensitivity [SPLo], dB @ 1W, 1m	90	90	92
Power Range, Watts RMS	6-50	6-35	6-70
Peak Power Handling, Watts	100	70	140
Effective Frequency Range, Hz	43-20k	45-20k	30-21k
Top-Mount Depth, in (cm)	1 7/8 (4.8)	2 5/16 (5.9)	3 3/16 (8.1)
Bottom-Mount Depth, in (cm)	2 1/4 (5.7)	2 11/16 (6.8)	3 11/16 (9.4)
Mounting Hole Diameter, in (cm)	4 7/8 (12.4)	5 x 7 1/8 (12.7x18.1)	5 7/8 x 8 7/8 (15.0x22.5)
Frame Diameter, in (cm)	6 1/4 (15.9)	5 1/2 x 7 1/2 (14.0x19.1)	6 5/8 x 9 3/16 (16.8x23.2)
Woofer Size, in (cm)	6 (15.3)	6 x 8 (15.2x20.3)	6 x 9 (15.2x22.9)
Woofer Cone Material	Polypropylene	Polypropylene	Polypropylene
Woofer Surround Material	Ribbed Polyfoam	Ribbed Polyfoam	Ribbed Polyfoam
Tweeter Size, in (cm)	1/2 (1.3)	1/2 (1.3)	1/2 (1.3)
Tweeter Design	Balanced Dome	Balanced Dome	Balanced Dome
Tweeter Diaphragm Material	PEN	PEN	PEN
Tweeter Magnet Material	Neodymium	Neodymium	Neodymium
Tweeter Protrusion, in (cm)	3/16 (.48)	1/8 (.32)	5/8 (.95)
Midrange Size, in (cm)	N / A	N / A	2 (5.1)
Midrange Design	N / A	N / A	Cone
Midrange Cone Material	N / A	N / A	PEN
Grills Included	Yes	No	Yes

Installation

Your Kicker DS-Series drivers are specifically designed for mounting in free-air applications. The speakers do not require a sealed enclosure for optimum performance. It is important to isolate the sound coming off the front of the driver from the sound radiating from the back of the driver. This isolation is usually accomplished by using the correct size driver in a factory speaker location.

Mounting

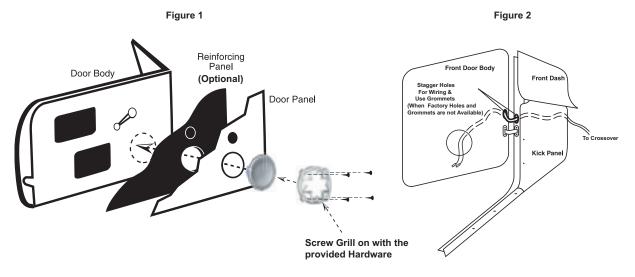
Use caution when mounting speakers through the rear deck or package tray of a vehicle. Please be aware of wiring harnesses, trunk springs, hinges, and folding seat mechanisms that may interfere with the operation of the car or speaker system. When running the speaker wires, be careful not to damage them with seat bolts or door screws.





If custom door mounting locations for the DS-Series Coax Speakers are desired, be careful to avoid interference from the window and door lock mechanisms. The first step is to find a location on the door panel that will accept the dimensions of the speaker. Then remove the door panel from the door, and check for operational clearance of the window. Cycle the window all the way down and up. If metal must be cut to mount the speakers, avoid structural metal and braces. An optional reinforcing panel (thin piece of wood or Medium Density Fiberboard) may be necessary if the door panel cannot support the weight of the speaker. Mount the speaker to the door panel and door body as outlined in Figure 1.

If the factory door speaker wiring is not available, it will be necessary to run the supplied wire through the door jamb. The speaker wire should be kept away from sharp edges and avoid the possibility of getting pinched by the door. An existing grommet in the door jamb is the ideal place to run the speaker wire. If the factory hole and grommet do not exist or are inaccessible, you must drill a hole to run the speaker wire through the door jam. Be careful not to drill into other wiring or existing door mechanisms. Any time a wire is run through a hole, it is necessary to insert a rubber or plastic grommet to protect the wire from damage as outlined in Figure 2.



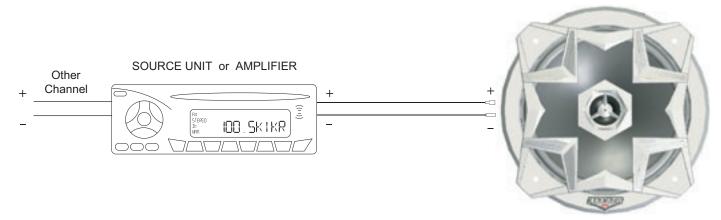


Wiring

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Hooking up the supplied wires to your Kicker DS-Series Coax Speakers is easy. The end of each wire is terminated with a large and a small connector. The larger connector is crimped to the gray wire and connects to the larger positive terminal of the speaker. The smaller connector is crimped to the black wire and connects to the smaller negative terminal of the speaker. The other end of these wires connect to your source unit or amplifier in a similar manner. The gray wire connects to the positive output of the amplifier or source unit. The black wire connects to the negative output of the amplifier or source unit. These connections can be made with the crimp-down style connectors, or with solder and heat shrink or electrical tape to prevent electrical shorting of the speakers.

Note: To get the best performance from your Kicker DS-Series Coax Speakers, we recommend using *genuine* Kicker Accessories and Wiring.

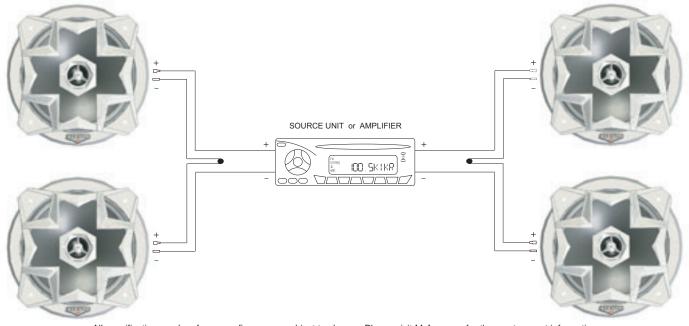


If you have any questions about the installation of your Kicker DS-Series Coax Speakers, see the Authorized Kicker Dealer where you made your purchase. For more advice on installation, click on the <u>SUPPORT</u> tab on the Kicker homepage, *www.kicker.com*. Choose the <u>Technical Support</u> tab, choose subject you are interested in, and then download or view the corresponding information. Please E-mail <u>support@kicker.com</u> or call Technical Services (405) 624-8583 for specific or unanswered questions.

DS-Serves Coax Speakers

Wiring two DS-Series Coax Speakers to a single channel

Modern high performance coaxial speakers have a lower DC Resistance than what used to be available. The Kicker DS-Series Coax Speakers are rated at four ohms and work with any source unit or amplifier designed to operate at a four ohm load. If you want to use two DS-Series Coax Speakers on each channel of your source unit or amplifier wire the speakers in series, as shown below. This will improve the sound quality, lower the total harmonic distortion and lessen the thermal load at the source unit or amplifier. This may prevent an amplifier from shutting down, due to over-current protection circuitry.



All specifications and performance figures are subject to change. Please visit kicker.com for the most current information.

ACOUSTICS LIMITED WARRANTY

Kicker warrants this product to be free from defects in material and workmanship under normal use for a period of **THREE (3) MONTHS** from date of original purchase with receipt. When purchased from an Authorized KICKER Dealer it is warranted for **ONE (1) YEAR** from date of original purchase with receipt. In all cases you **must have** the **original receipt!** Should service be necessary under this warranty for any reason due to manufacturing defect or malfunction during the warranty period, Kicker will repair or replace (at its discretion) the defective merchandise with equivalent merchandise at no charge. Warranty replacements may have cosmetic scratches and blemishes. Discontinued products may be replaced with more current equivalent products.

This warranty is valid only for the **ORIGINAL PURCHASER** and is not extended to owners of the product subsequent to the original purchaser. Any applicable implied warranties are limited in duration to a period of the express warranty as provided herein beginning with the date of the original purchase at retail, and no warranties, whether express or implied, shall apply to this product thereafter. Some states do not allow limitations on implied warranties, therefore these exclusions may not apply to you. This warranty gives you specific legal rights; however you may have other rights that vary from state to state.

WHAT TO DO IF YOU NEED WARRANTY OR SERVICE

Defective merchandise should be returned to your local Authorized Stillwater Designs (Kicker) Dealer for warranty. Assistance in locating an Authorized Dealer can be obtained by writing, calling, or by visiting **kicker.com**. You can confirm that a dealer is authorized by asking to see a current authorized dealer window decal.

If it becomes necessary for you to return defective merchandise directly to Stillwater Designs (Kicker), call the Kicker Customer Service Department at (405) 624-8510 for a Return Authorization (RMA) number. Package all defective items in the original container or in a package that will prevent shipping damage, and return to:

Stillwater Designs, 5021 North Perkins Road, Stillwater, OK 74075

The RMA number must be clearly marked on the outside of the package. Please return **only defective components** (speaker, grill connector, etc.). The return of functioning items increases your return freight charges. Non-defective items received will be returned freight collect.

Include a copy of the original receipt with the purchase date clearly visible, and a "**proof-of-purchase**" statement listing the Customer's name, Dealer's name and invoice number, and product purchased. Warranty expiration on items without proof-of-purchase will be determined from type of sale and the manufacturing date code. Freight must be prepaid; items sent freight collect, or COD, will be refused.

Failure to follow these steps may void your warranty. Any questions can be directed to the Kicker Customer Service Department at (405) 624-8510.

WHAT IS NOT COVERED?

This warranty is valid only if the product is used for the purpose for which it was designed.

It does not cover:

- Damage due to improper installation.
- Subsequent damage to other components.
- Damage caused by exposure to moisture, excessive heat, chemical cleaners, and/or UV radiation.
- Damage through negligence, misuse, accident or abuse. Repeated returns for the same damage may be considered abuse.
- Any cost or expense related to the removal or reinstallation of product.
- Speakers damaged due to amplifier clipping or distortion.
- · Items previously repaired or modified by any unauthorized repair facility.
- · Return shipping on non-defective items.
- · Products with tampered or missing bar code labels.
- Products returned without a Return Authorization (RMA) number.
- Freight Damage.
- The cost of shipping product to Kicker.
- · Service performed by anyone other than Kicker.

HOW LONG WILL IT TAKE?

Kicker strives to maintain a goal of 24-hour service for all acoustics (subwoofers, midrange drivers, tweeters, crossovers, etc) returns. Delays may be incurred if lack of replacement inventory or parts is encountered.

INTERNATIONAL WARRANTY

Contact your International Kicker dealer or distributor concerning specific procedures for your country's warranty and service policies.



P.O. Box 459 • Stillwater, Oklahoma 74076 • U.S.A. • (405) 624-8510

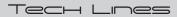


KICKER drivers are capable of producing sound levels that can permanently damage your hearing! Turning up a system to a level that has audible distortion is more damaging to your ears than listening to an undistorted system at the same volume level. The threshold of pain is always an indicator that the sound level is too loud and may permanently damage your hearing.

Please use common sense when controlling volume!

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